

County of Yolo

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MEMORANDUM

TO:

Central Valley Regional Water Quality Control Board

FROM:

County of Yolo (prepared by Philip J. Pogledich, Deputy County Counsel)

DATE:

June 8, 2005

RE:

Regulation of Mercury in Cache Creek and Other Area Surface Waters

This memorandum sets forth additional comments of the County of Yolo ("County") regarding the proposed amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins ("Basin Plan") to regulate mercury in Cache, Bear, and Sulfur Creeks and Harley Gulch. The following comments focus on legal shortcomings of the proposed Basin Plan amendments and the process employed by Central Valley Regional Water Quality Control Board ("Regional Board") staff in connection with the proposed amendments. The County objects to any action by the Regional Board to amend the Basin Plan until these issues are addressed in the manner required by California law.

I. THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

Regional Board staff have acknowledged that the proposed Basin Plan amendments—including the beneficial use additions, water quality objectives, and the implementation alternatives—are subject to review under the California Environmental Quality Act, Public Resources Code §§ 21000 et seq. ("CEQA"). Staff Report, p. v. In the context of Basin Plan amendments, a certified regulatory program governs the preparation of environmental review documents required for planning actions, and such substitute documents must be the "functional equivalent" of the environmental documents required under CEQA. Id. at p. 74; CEQA Guidelines § 15251(g). The County believes that the Staff Report, which contains analysis that appears equivalent to a negative declaration, fails to satisfy numerous substantive requirements of CEQA and the certified regulatory program.

There are two principal flaws in the Staff Report that are directly relevant to its shortcomings as a substitute environmental document. First, the environmental analysis of Regional Board staff is based on, and thus limited in scope by, the vague, shifting, and incomplete description of the "implementation program" alternatives and other aspects of the proposed Basin Plan amendments contained in the Staff Report. The County and other commenting parties have repeatedly highlighted the many uncertain and poorly defined

¹ All references to the Staff Report are to the "public review draft report" released in May 2005.

components of the proposed implementation alternatives.² This significant shortcoming hampers meaningful analysis of the environmental effects of the proposed Basin Plan amendments. Obviously, without an adequate description of the implementation alternatives and other aspects of the proposed Basin Plan amendments, a sound analysis of the potential environmental effects of the amendments cannot occur.

Second, rather than including a broad discussion of the full range of potential environmental effects of the proposed Basin Plan amendments, the Staff Report focuses narrowly on water quality issues and largely ignores other potential environmental effects. This narrow focus is at least partly the result of many ambiguous and undefined aspects of the proposed amendments, as discussed above. Yet it also appears to be an independent problem that cannot be cured simply by adding detail to the implementation alternatives and other elements of the proposed Basin Plan amendments. This is readily apparent in Section 7 of the Staff Report, entitled "Environmental Checklist and Discussion." The analysis in that section does not account for many potentially significant environmental impacts of the proposed amendments. In conjunction with the serious flaw described in the previous paragraph of this memorandum, this shortcoming contributes to several additional, specific shortcomings in the environmental analysis contained in the Staff Report. At least the following issues must also be addressed by Regional Board staff if the Staff Report is to properly fulfill its role as a substitute environmental document under CEQA and the certified regulatory program.

First, the environmental analysis does not fully consider the impact of the proposed Basin Plan amendments on agricultural resources. Somehow, even though the proposed implementation plan contemplates a moratorium on certain agricultural land uses such as grazing (Staff Report, pp. 12, 49, 58), the "Environmental Checklist" concludes that the proposed Basin Plan amendments will have "no impact" on agricultural resources (Staff Report, p. 79). This "no impact" conclusion is demonstrably at odds with the proposed implementation alternatives and even the discussion that follows the environmental checklist. Staff Report, p. 90. Clearly, a moratorium on grazing has the potential to convert land from agricultural to other uses, not to mention the significant financial effect of a moratorium on affected landowners. This analysis is also deficient because there is no indication that Regional Board staff have considered the potential geographic extent of a grazing moratorium, identified any active rangeland operations that could be impacted, or otherwise assessed the practical effect of a moratorium. Without such analysis, there is no factual basis for a conclusion that the proposed amendments will have "no impact" on agricultural resources.

Second, the proposed Basin Plan amendments will have significant effects on biological resources that have not been not identified or discussed in the environmental analysis prepared by Regional Board staff. This is likely a product of the general problem, noted above, of the narrow focus on water quality issues rather than all of the potential environmental impacts of the proposed amendments. As the County has repeatedly stated, the proposed implementation alternatives (to the extent their details can be discerned) may curtail the County's ongoing efforts to remove invasive plant species, restore wildlife habitat, and accomplish other environmentally beneficial activities such as those detailed in its "Cache Creek Resource Management Plan" ("CCRMP"). At least in part, this is because the proposed amendments may drastically increase the cost of such projects, rendering them infeasible. This consequence may be unintended, but it cannot be overlooked. To facilitate a complete analysis of the impact of the proposed amendments on biological resources, Regional Board staff should consult with the County to develop information about the potential curtailment of these activities and the resulting detriment to biological resources. Otherwise, potentially significant environmental

² See letters dated February 15, 2005 and April 19, 2005, as well as the letter accompanying this memorandum.
³ See the letters referenced in footnote 2, above.

⁴ The CCRMP is available at www.yolocounty.org/prm/PRWAC/articles/CCRMPfnl.pdf.

effects of the proposed Basin Plan amendments on biological resources will be improperly ignored, thus preventing an analysis of potential mitigation (such as an exemption for wildlife habitat restoration, invasive weed removal, and certain erosion control projects).

Third, the environmental analysis does not fully identify and discuss the full range of potential effects of the proposed Basin Plan amendments on geology and soils. The County has identified various ways in which the proposed amendments may not only curb its ongoing erosion control and road maintenance activities, but also increase the erosion of streambanks.⁵ As with County projects affecting biological resources, this is at least partly because the proposed amendments appear likely to drive up the cost of undertaking such projects, thus rendering infeasible an unknown fraction of them. The resulting increases in erosion have not been considered in the Staff Report, and the discussion following the "Environmental Checklist" does not even mention this potentially significant environmental impact. Again, as with projects affecting biological resources, Regional Board staff should consult with the County to ascertain the extent to which erosion control projects (including components of the CCRMP) may be affected by the proposed amendments, resulting in a potentially significant adverse environmental impact that has not yet been considered.

Fourth, for similar reasons, the environmental analysis does not fully consider the related effects of the proposed Basin Plan amendments on hydrology and water quality. To the extent that the proposed amendments could increase erosion, as discussed in the previous paragraph, hydrology and water quality could be detrimentally affected. These impacts need to be evaluated in the Staff Report, and without such analysis the Staff Report is legally deficient.

Fifth, the environmental analysis fails to identify and discuss certain effects of the proposed Basin Plan amendments on land use and planning or population and housing, even though the Staff Report notes that "[I]and uses that might be affected by this project could include agriculture, grazing, road building and maintenance, and construction activities at areas with elevated mercury concentrations." Staff Report, p. 93. To satisfy CEQA, the Staff Report must do more than simply state that these land uses "might be affected." Further analysis is critical to support the proposed conclusion that the proposed Basin Plan amendments will have "no impact" on land uses, particularly as the Staff Report concludes that many land uses "might be affected." Without this analysis, the Staff Report is deficient and fails to satisfy CEQA. Such further analysis should, at a minimum, include consultation with County staff and an analysis of the CCRMP, as well as consideration of the issues referenced in the above comment relating to agricultural resources. It should also consider the degree to which active gravel mining operations might be affected, and consistency with the County's gravel mining regulations should be analyzed.

Sixth, the impact of the proposed Basin Plan amendments on public services has not been fully evaluated. As noted, an unintended consequence of the proposed Basin Plan amendments is a potentially significant increase in the cost of, among other things, carrying out routine road maintenance and streambank erosion control projects. To the extent the County devotes staff and financial resources to carry out these projects at an increased cost, whether voluntarily or under compulsion by the Regional Board, resources from other public services provided by the County may have to be redirected. The vague nature of the proposed implementation alternatives and other aspects of the Basin Plan amendments makes it difficult, if not impossible, for the County to fully understand what will be required of it. This uncertainty prevents the County from determining the impact of the proposed amendments on County resources and, in turn, County public services. Regional Board staff should therefore clarify what will be required of the County and then, in consultation with County

⁵ See the letters referenced in footnote 2, above.

staff, assess the degree to which the County's ability to provide public services will be impacted by the resulting diversion of the County's finite fiscal and staff resources to activities necessary to comply with the proposed Basin Plan amendments.

For all of these reasons, the Regional Board simply cannot conclude that "the proposed project has no potential for adverse effect, either individually or cumulatively, on wildlife or the environment," as urged by Regional Board staff. Staff Report, p. 96. The Staff Report fails to satisfy the basic substantive goal of CEQA: identification and discussion of the environmental effects of a proposed project and ways to reduce or avoid such effects. Further analysis of the effects noted above must be conducted, and an environmental impact report or its functional equivalent must be prepared. This approach is critical, as it may identify certain measures that can be taken to reduce or avoid some of the significant environmental effects of the proposed Basin Plan amendments. Unless these steps to comply with CEQA and the certified regulatory program are taken, any action taken by the Regional Board to adopt the proposed Basin Plan amendments will be invalid.

II. ECONOMIC CONSIDERATIONS.

California law requires the Regional Board to consider economic factors in connection with the development of TMDLs. Memoranda prepared by the Office of the Chief Counsel for the State Water Resources Control Board ("State Board") detail this requirement, which to date remains unsatisfied in connection with the proposed Basin Plan amendments. Some of the problems with the economic analysis of Regional Board staff are detailed in the letter accompanying this memorandum. The following discussion expands on these problems and identifies additional shortcoming in the economic analysis of Regional Board staff.

A general problem with the limited economic analysis contained in the Staff Report is that, as noted above, the implementation alternatives and certain other components of the proposed Basin Plan amendments have not been fully developed. This prevents a sound analysis of the economic (and environmental) effects of the amendments. For this reason alone, the Regional Board should not take any action on the proposed Basin Plan amendments until these deficiencies are addressed.

Separately, as the Regional Board is aware, it is authorized to establish water quality objectives that, in its judgment, "will ensure the *reasonable* protection of beneficial uses and the prevention of nuisance." Water Code § 13241 (emphasis added). In establishing water quality objectives, the Regional Board must consider "water quality conditions that could *reasonably* be achieved," and it is specifically directed to assess "economic considerations" as part of this process. Water Code § 13241(c)-(d) (emphasis added). In a similar context, the term "reasonable" was construed to require an analysis of whether the benefits of a particular regulatory scheme justifed the costs associated with its implementation. E.g., Appalachian Power Co. v. Train, 545 F.2d 1351, 1361 (4th Cir. 1976). Published decisions like Appalachian Power are directly relevant to the meaning of "reasonable" in Water Code § 13241, and should guide the Regional Board's evaluation of whether the projected cost (conservatively estimated by Regional Board staff at \$10.5-17 million) of implementing the proposed Basin Plan amendments is justified by the purported environmental benefit of the amendments (i.e., achievement of water quality objectives in "possibly several hundred years"). Staff Report, pp. 65-66.

⁶ Copies of each memorandum are attached. The first memorandum, prepared by Sheila Vassey on October 27, 1999, relates specifically to economic considerations in TMDL development and basin planning. The second memorandum, prepared by William Attwater on January 4, 1994, covers more general issues relating to the adoption of water quality objectives.

The County believes that to the extent these significant costs may be borne by the public (whether by the County or other public entities, with the partial exception of the United States Bureau of Land Management as the owner of certain mines), rather than the current and former owners and operators of the mines that are responsible for non-natural mercury levels in the affected waterways, the projected implementation costs are both inequitable and unreasonable. The County certainly shares the Regional Board's commitment to promoting the wildlife and recreational values of the affected waterways, including Cache Creek. For many years, the County has devoted considerable resources to projects along Cache Creek intended to preserve and enhance these values. However, particularly to the extent that many beneficial County projects may be curtailed by the proposed Basin Plan amendments, the County objects to the expenditure of public monies on projects that Regional Board staff have not demonstrated—through a cost effectiveness analysis or otherwise—will contribute to the achievement of the proposed water quality objectives. In these circumstances, the County submits that the proposed Basin Plan amendments run counter to the Regional Board's statutory duty to adopt water quality objectives that ensure the "reasonable protection" of beneficial uses, taking into account water quality conditions that can "reasonably be achieved." Water Code § 13241. Other, less stringent water quality objectives should be given serious consideration by the Regional Board.

More specifically, the County also believes that Regional Board staff has not performed sufficient analysis to enable the Regional Board to properly weigh "economic considerations" in deciding whether to adopt the proposed Basin Plan amendments. Water Code § 13241(d). The shortcomings in the economic analysis of the proposed Basin Plan amendments are readily apparent. For instance, the Staff Report does not discuss the implications of requiring various entities to carry out the various implementation alternatives—mine owners, public agencies, and private parties. The absence of such discussion is contrary to the advice in the memorandum prepared by William Attwater, which calls for consideration of "information provided by discharges or other interested persons regarding the potential cost implications of adoption of a proposed objective." Attwater Memo, p. 5. There is no indication that Regional Board staff have considered or even solicited such information. Again, the ambiguity of many elements of the proposed implementation plan likely precludes affected parties (like the County) from providing such information in the first instance. This problem is compounded by the lack of detail in the Staff Report regarding how the Regional Board prepared its cost estimates. Such information is necessary to enable the County and other interested parties—as well as the Regional Board—to determine whether the projects costs of different implementation alternatives are complete and accurate. These shortcomings must be addressed.

Further, as noted in previous comments by the County, the environmental benefits of components of the proposed implementation alternatives (including the regulation of minor erosion control projects, infrastructure maintenance, and wildlife habitat restoration) do not appear to have been thoroughly evaluated by Regional Board staff. A full assessment of the cost effectiveness of these (and other) components of the proposed implementation alternatives is warranted. A cost effectiveness analysis is also a critical tool for enabling the

⁷ Similarly, the Staff Report indicates that the various implementation alternatives are feasible "with sufficient funds," but it does not indicate that Regional Board staff has ascertained whether funding is likely to be available. Staff Report, p. 65. Further, in reference to projects that are part of Implementation Alternative 2 (the recommended alternative), the Staff Report notes that the projects "seem to be reasonable approaches" without any meaningful explanation of how staff arrived at this conclusion. Id.

⁸ The County is also puzzled by an apparent discrepancy between the projected \$10.5-17 million cost of Implementation Alternative 2 (the recommended alternative) and the cost figures shown in Table 5.6. If the figures in Table 5.6 are accurate, Implementation Alternative 2 will cost more than \$10.5-17 million to implement. This discrepancy must be resolved, and the County should be given a further opportunity to comment before the Regional Board takes any action.

Regional Board to appropriately prioritize and phase regulatory actions, as discussed further in the letter accompanying this memorandum. Importantly, it is also a necessary step toward satisfying the statutory mandate to weigh "economic considerations" as part of the process of establishing water quality objectives. Water Code § 13241.

In conclusion, based on information contained in the Staff Report and other documents reviewed by the County, the County does not believe that the Regional Board has a sound factual basis for weighing "economic considerations" in determining whether to approve the proposed Basin Plan amendments. Additional information regarding implementation costs, including the ability of responsible parties to fund projects associated with the implementation alternatives, must be compiled and included in the Staff Report. Before such information can be provided, however, Regional Board staff must clarify many aspects of the proposed Basin Plan amendments, including the implementation alternatives, and provide a complete analysis of the potential environmental effects of the economic impact of the proposed Basin Plan amendments (as discussed in Section I, above). The County requests that the Regional Board take no action on the proposed amendments without this additional information and analysis.

Attachments

ATTACHMENT B

ATTACHMENT C



Winston H. Hickox Secretary for Environmental Protection

State Water Resources Control Board

Office of Chief Counsel

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TO:

Stefan Lorenzato
TMDL Coordinator
Division of Water Quality

FROM:

Sheila K. Vassey

Senior Staff Counsel

OFFICE OF CHIEF COUNSEL

DATE:

OCT 2 7 1999

SUBJECT:

ECONOMIC CONSIDERATIONS IN TMDL DEVELOPMENT AND

BASIN PLANNING

ISSUE

When are the Regional Water Quality Control Boards (Regional Water Boards or Boards) legally required to consider economics in Total Maximum Daily Load (TMDL)¹ development and water quality control planning (basin planning)?²

CONCLUSION

The Regional Water Boards, in general, adopt TMDLs as basin plan amendments. Under state law, there are three triggers for Regional Water Board consideration of economics or costs in basin planning. These are:

- The Regional Water Boards must estimate costs and identify potential financing sources in the basin plan before implementing any agricultural water quality control program.
- The Boards must consider economics in establishing water quality objectives that ensure the reasonable protection of beneficial uses.

See 33 U.S.C. § 1313(d); 40 C.F.R. § 130.7.

See Wat. Code §§ 13240-13247.

The Boards must comply with the California Environmental Quality Control
Act (CEQA)³ when they amend their basin plans. CEQA requires that the
Boards analyze the reasonably foreseeable methods of compliance with
proposed performance standards and treatment requirements. This analysis
must include economic factors.

Economic factors come into play under federal law when the Regional Water Boards designate uses. Specifically, the Boards can decide not to designate, dedesignate, or establish a subcategory of, a potential use where achieving the use would cause substantial and widespread economic and social impact.

DISCUSSION

I. STATE LAW

Under federal and state law, the Regional Water Boards are required to include TMDLs in their basin plans.⁴ There are three statutory triggers for an economic or cost analysis in basin planning. These triggers are:

- · adoption of an agricultural water quality control program;
- · adoption of water quality objectives; and
- adoption of a treatment requirement or performance standard (CEQA).

Each category is briefly discussed below.

A. Agricultural Water Quality Control Program

Agricultural activities are significant sources of nonpoint source pollution. Many waterbodies in the state are impaired due to one or more agricultural operations. As a result, the Regional Water Boards will be faced with developing programs to control agricultural activities, as part of TMDL development.

Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), before a Regional Water Board implements an agricultural water quality control program, the Board must identify

Pub. Resources Code § 21000 et seq.

See 33 U.S.C. § 1313(d); 40 C.F.R. § 130.7(d)(2) (TMDLs must be incorporated into the state's water quality management plan. In California the basin plans are part of the state's water quality management plan.); Wat. Code §§ 13050(j), 13242.

³ Wat. Code § 13000 et seq.

the total cost of the program and potential sources of financing.⁶ This information must be included in the basin plan.

The statute does not define "agricultural" programs. The Legislature has, however, defined agricultural activities elsewhere to mean activities that generate "horticultural, viticultural, forestry, dairy, livestock, poultry, bee, or farm product[s]." Because "agricultural" programs under Porter-Cologne are not restricted to particular activities, presumably, the Legislature intended that the term be interpreted broadly. Thus, the Regional Water Boards should identify costs and financing sources for agricultural water quality control programs" covering not only typical farming activities but also silviculture, horticulture, dairy, and the other listed activities.

The statute focuses only on costs and financing sources. The statute does not require the Regional Water Boards to do, for example, a cost-benefit analysis or an economic analysis.

B. Water Quality Objectives

Porter-Cologne requires that the Regional Water Boards take "economic considerations", among other factors, into account when they establish water quality objectives. The objectives must ensure the reasonable protection of beneficial uses and the prevention of nuisance.

Attached to this memorandum is a 1994 memorandum containing guidance on the consideration of economics in the adoption of water quality objectives. 10 The key points of this guidance are:

- The Boards have an affirmative duty to consider economics when adopting water quality objectives.
- At a minimum, the Boards must analyze: (1) whether a proposed objective is currently being attained; (2) if not, what methods are available to achieve compliance with the objective; and (3) the costs of those methods.

⁶ Id. § 13141.

⁷ Food & Agr. Code §§ 564(a), 54004.

⁸ Wat. Code § 13241. The other factors include the past, present, and probable future beneficial uses of water; environmental characteristics of the hydrographic unit under consideration; water quality conditions that could reasonably be achieved through the coordinated control of all factors affecting water quality in the area, the need for developing housing, and the need to develop and use recycled water.

⁹ Ibid.

Memorandum, dated January 4, 1994, from William R. Attwater, Chief Counsel, to Regional Water Board Executive Officers and Attorneys, entitled "Guidance on Consideration of Economics in the Adoption of Water Quality Objectives".

- If the economic consequences of adoption of a proposed objective are
 potentially significant, the Boards must state on the record why adoption of
 the objective is necessary to ensure the reasonable protection of beneficial
 uses or the prevention of nuisance.
- The Regional Water Boards can adopt objectives despite significant economic consequences.
- The Boards are not required to do a formal cost-benefit analysis.

C. CEOA

The Regional Water Boards must comply with CEQA when they amend their basin plans. ¹¹ The State Resources Agency has certified the basin-planning program as exempt from the requirement to prepare environmental documents under CEQA. ¹² In lieu of preparing an environmental impact report or negative declaration, the Boards must comply with the State Water Resources Control Board's regulations on exempt regulatory programs when they amend their basin plans. ¹³ These regulations require the Boards to prepare a written report that analyzes the environmental impacts of proposed basin plan amendments. ¹⁴ In general, CEQA requires the Regional Water Boards to consider economic factors only in relation to physical changes in the environment. ¹⁵

CEQA also has specific provisions governing the Regional Water Boards' adoption of regulations, such as the regulatory provisions of basin plans that establish performance standards or treatment requirements. The Boards must do an environmental analysis of the reasonably foreseeable methods of compliance with those standards or requirements. They must consider economic factors in this analysis.

CEQA does not define "performance standard"; however, the term is defined in the rulemaking provisions of the Administrative Procedure Act. 17 A "performance standard" is a regulation that describes an objective with the criteria stated for achieving the objective. 18

¹¹ See Pub. Resources Code § 21080.

¹² See Cal. Code Regs., tit. 14, §.15251(g).

See Cal. Code Regs., tit. 23, §§ 3775-3782.

¹⁴ Id. § 3777.

¹⁵ See Cal. Code Regs., tit. 14, § 15064(e).

Pub. Resources Code § 21159.

¹⁷ Gov. Code §§ 11340-11359.

¹⁸ Id. § 11342(d).

TMDLs will typically include performance standards. TMDLs normally contain a quantifiable target that interprets the applicable water quality standard. They also include wasteload 19 allocations for point sources, and load allocations 20 for nonpoint sources and natural background to achieve the target. The quantifiable target together with the allocations may be considered a performance standard. Thus, the Regional Water Board must identify the reasonably foreseeable methods of compliance with the wasteload and load allocations and consider economic factors for those methods. This economic analysis is similar to the analysis for water quality objectives discussed above. That is, the Regional Water Board should determine: (1) whether the allocations are being attained; (2) if not, what methods of compliance are reasonably foreseeable to attain the allocations; and (3) what are the costs of these methods.

II. FEDERAL LAW

Under federal law, economics can be considered in designating potential beneficial uses. Specifically, the federal water quality standards regulations allow a state to dedesignate, to decide not to designate, or to establish a subcategory of a potential beneficial use on economic grounds. To rely on this basis, the state must demonstrate that attaining the use is infeasible because the controls necessary to attain the use "would result in substantial and widespread economic and social impact."²²

The states can take this action only for potential uses. These are uses that do not meet the definition of an "existing use". Existing uses are those uses actually attained in the water body on or after November 28, 1975. 23

Attachment.

¹⁹ See 40 C.F.R. § 130.2(g). A wasteload allocation is the portion of the receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution.

See id. § 130.2(g). A load allocation is the portion of the receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources.

²¹ See id. § 130.2(i). A TMDL is the sum of the individual wasteload and load allocations.

²² See id. § 131.10(g)(6).

²³ Id. § 131.3(e).

ATTACHMENT D

State of California

, emorandum

: Regional Water Board Executive Officers

Date: JAN -4 1994

Regional Water Board Attorneys

William R. Attwater

Chief Counsel

OFFICE OF THE CHIEF COUNSEL

STATE WATER RESOURCES CONTROL BOARD

· 901 P Street, Sacramento, CA 95814

Mail Code: G-8

Subject: GUIDANCE ON CONSIDERATION OF ECONOMICS IN THE ADOPTION OF WATER QUALITY OBJECTIVES

ISSUE

What is required of a Regional Water Quality Control Board (Regional Water Board) in order to fulfill its statutory duty to consider economics when adopting water quality objectives in water quality control plans or in waste discharge requirements?

CONCLUSION

A Regional Water Board is under an affirmative duty to consider economics when adopting water quality objectives in water quality control plans or, in the absence of applicable objectives in a water quality control plan, when adopting objectives on a case-by-case basis in waste discharge requirements. To fulfill this duty, the Regional Water Board should assess the costs of the proposed adoption of a water quality objective. This assessment will generally require the Regional Water Board to review available information to determine the following: (1) whether the objective is currently being attained; (2) what methods are available to achieve compliance with the objective, if it is not currently being attained; and (3) the costs of those methods. The Regional Water Board should also consider any information on economic impacts provided by the regulated community and other interested parties.

If the potential economic impacts of the proposed adoption of a water quality objective appear to be significant, the Regional Water Board must articulate why adoption of the objective is necessary to assure the reasonable protection of beneficial uses of state waters, despite the potential adverse economic consequences. For water quality control plan amendments, this

discussion could be included in the staff report or resolution for the proposed amendment. For waste discharge requirements, the rationale must be reflected in the findings.

DISCUSSION

A. Legal Analysis

1. Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, Water Code Section 13000 et seq. (Porter-Cologne Act or Act), the State Water Resources Control Board (State Water Board) and the Regional Water Boards are the principal state agencies charged with responsibility for water quality protection. The State and Regional Water Boards (Boards) exercise this responsibility primarily through the adoption of water quality control plans and the regulation of waste discharges which could affect water quality. See Water Code Secs. 13170, 13170.2, 13240, 13263, 13377, 13391.

Water quality control plans contain water quality objectives, as well as beneficial uses for the waters designated for protection and a program of implementation to achieve the objectives. Id. Sec. 13050(j). In the absence of applicable water quality objectives in a water quality control plan, the Regional Water Board may also develop objectives on a case-by-case basis in waste discharge requirements. See id. Sec. 13263(a).

When adopting objectives either in a water quality control plan or in waste discharge requirements, the Boards are required to exercise their judgment to "ensure the reasonable protection of beneficial uses and the prevention of nuisance". Id. Secs. 13241, 13263; see id. Sec. 13170. The Porter-Cologne Act recognizes that water quality may change to some degree without

I The focus of this memorandum is limited to an analysis of the Boards' obligation to consider economics when adopting water quality objectives either in water quality control plans or, on a case-by-case basis, in waster discharge requirements. This memorandum does not discuss the extent to which the Boards' are required to consider the factors specified in Water Code Section 13241 in other situations. Specifically, this memorandum does not discuss the applicability of Section 13241 to the development of numeric effluent limitations, implementing narrative objectives contained in a water quality control plan. Further guidance on the latter topic will be developed at a later date.

Causing an unreasonable effect on beneficial uses. Id. The Act, therefore, identifies factors which the Boards must consider in determining what level of protection is reasonable. Id.² These factors include economic considerations. Id.³

The legislative history of the Porter-Cologne Act indicates that "[c]onservatism in the direction of high quality should guide the establishment of objectives both in water quality control plans and in wastedischarge requirements". Recommended Changes in Water Quality Control, Final Report of the Study Panel to the [State Water Board], Study Project--Water Quality Control Program, p. 15 (1969) (Final Report). Objectives should "be tailored on the high quality side of needs of the present and future beneficial uses". Id. at 12. Nevertheless, objectives must be reasonable, and economic considerations are a necessary part of the determination of reasonableness. "The regional boards must balance environmental characteristics, past, present and future beneficial uses, and economic considerations (both the cost of providing treatment facilities and the economic value of development) in establishing plans to achieve the highest water quality which is reasonable." Id. at 13.

2. <u>Senate Bill 919</u>

The Boards are under an additional mandate to consider economics when adopting objectives as a result of the recent enactment of Senate Bill 919. 1993 Cal. Stats., Chap. 1131, Sec. 8, to be codified at Pub. Res. Code, Div. 13, Ch. 4.5, Art. 4. The legislation, which is

 (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;

² Other factors which must be considered include:

⁽A) Past, present, and probable future beneficial uses of water;

⁽c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;

⁽d) The need for developing housing within the region;

⁽e) The need to develop and use recycled water.

³ See also Water Code Section 13000 which mandates that activities and factors which may affect water quality "shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible" (emphasis added).

effective January 1, 1994, amended the California Environmental Quality Control Act, Public Resources Code Section 21000 et seq. (CEQA), to require that, whenever the Boards adopt rules requiring the installation of pollution control equipment or establishing a performance standard or treatment requirement, the Boards must conduct an environmental analysis of the reasonably foreseeable methods of compliance. This analysis must take into account a reasonable range of factors, including economics. For the reasons explained above, the latter requirement is duplicative of existing requirements under the Porter-Cologne Act regarding consideration of economics.

B. Recommendation

The meaning of the mandate to "consider economics" in the Porter-Cologne Act is not entirely clear. It is clear that the Porter-Cologne Act does not specify the weight which must be given to economic considerations. Consequently, the Boards may adopt water quality objectives even though adoption may result in significant economic consequences to the regulated community. The Porter-Cologne Act also does not require the Boards to do a formal cost-benefit analysis.

The Porter-Cologne Act does impose an affirmative duty on the Boards to consider economics when adopting water quality objectives. The Boards probably cannot fulfill this duty . simply by responding to economic information supplied by the regulated community. Rather, the Boards should assess the costs of adoption of a proposed water quality objective. This assessment will normally entail three steps. First, the Boards should review any available information on receiving water and effluent quality to determine whether the proposed objective is currently being attained or can be attained. If the proposed objective is not currently attainable, the Boards should identify the methods which are presently available for complying with the objective. Finally, the Boards should consider any available information on the costs associated with the treatment technologies or other methods which they have identified for complying with a proposed objective.4

⁴ See, for example, Managing Wastewater In Coastal Urban Areas, National Research Council (1993). This text provides data on ten technically feasible wastewater treatment technologies, which can be used to make comparative. Judgments about performance and to estimate the approximate costs of meeting various effluent discharge standards, including standards for toxic organics and metals.

In making their assessment of the cost impacts of a proposed objective, the Boards are not required to engage in speculation. Rather, the Boards should review currently available information. In addition, the Boards should consider, and respond on the record, to any information provided by dischargers or other interested persons regarding the potential cost implications of adoption of a proposed objective.

If the economic consequences of adoption of a proposed water quality objective are potentially significant, the Boards must articulate why adoption of the objective is necessary to ensure reasonable protection of beneficial uses. If the objective is later subjected to a legal challenge, the courts will consider whether the Boards adequately considered all relevant factors and demonstrated a rational connection between those factors, the choice made, and the purposes of the Porter-Cologne Act. See California Hotel & Motel Assn. v. Industrial Welfare Com., 25 Cal.3d 200, 212, 157 Cal.Rptr. 840, 599 P.2d 31 (1979).

Reasons for adopting a water quality objective, despite adverse economic consequences, could include the sensitivity of the receiving waterbody and its beneficial uses, the toxicity of the regulated substance, the reliability of economic or attainability data provided by the regulated community, public health implications of adopting a less stringent objective, or other appropriate factors. These factors may also include the legislative directive that a of all beneficial uses. Final Report, p. 15 and App. A, p. 59.

If objectives are proposed for surface waters and adverse economic consequences stemming from adoption of the objectives could be avoided only if beneficial uses were downgraded, the Boards should address whether dedesignation would be feasible under the applicable requirements of the Clean Water Act and implementing regulations. See 40 C.F.R. Sec. 131.10. Dedesignation is feasible only for potential, rather than existing, uses. See id. Sec. 131.10(g). If the Boards should explain why, e.g., that there is a lack of data supporting dedesignation.

⁵ It should also be noted that, even if dedesignation of potential beneficial uses is feasible, in the great majority of cases it will not have any significant effect on the selection of a proposed objective. This is so because the proposed objective will be necessary to protect existing beneficial uses, which cannot be dedesignated.